

Amendments to the Drawings:

Figure 1 has been amended to label boxes 3 and 5 as --Multiplexer-- and box 6 as --Measuring Means--.

Attachment: Replacement Sheet

REMARKS

By this amendment, Applicants have amended the disclosure to eliminate the informalities noted by the Examiner in numbered section 7 of the Office Action. Applicants have amended the claims to eliminate the informalities noted in numbered section 8 of the Office Action and to overcome the rejection of claims 2 and 3 under 35 U.S.C. 112, second paragraph, in numbered section 10 of the Office Action. The drawings have been amended to label boxes 3 and 5 as --Multiplexer-- and box 6 as --Measuring Means-- as required by the Examiner in numbered section 4 of the Office Action.

In numbered section 1 of the Office Action, the Examiner maintains the election of species requirement and, in numbered section 2, withdraws claims 13-19 from consideration. This action is traversed.

The Examiner bases the election requirement on the fact that the groups identified by the Examiner as species "are variations of one another." However, as noted on page 7 of the Amendment filed November 10, 2005, the limitations set forth in steps (a), (b) and (c) of claim 1 and steps (f), (g) and (h) of claim 13 are common to both species. Therefore, the species are not mutually exclusive even if the species are slight variations of one another. Since the species are not mutually exclusive, restriction to a single species should not be required. Moreover, contrary to the Examiner's assertion, claim 19 is indeed generic. While the Examiner asserts that a homogeneous fluid does not have layers, the Examiner loses sight of the fact that a homogeneous fluid is, in effect, a single layer. Claim 19 is broad enough to cover both a fluid having a plurality of layers and a homogeneous fluid, i.e., a fluid having a single layer, since claim 19 recites in the preamble "at least one layer of a fluid." Therefore, claim 19 is generic.

For the foregoing reasons, the withdrawal from consideration of claims 13-19 is an error.

In view of the amendments to Figure 1, reconsideration and withdrawal of the objection to the drawings in numbered section 4 of the Office Action are requested.

In view of the foregoing amendments to the disclosure, reconsideration and withdrawal of the objection to the disclosure in numbered section 7 of the Office Action are requested.

In view of the foregoing amendments to the claims, reconsideration and withdrawal of the objection to the claims in numbered section 8 and the rejection of claims 2 and 3 under 35 U.S.C. 112, second paragraph, in numbered section 10 of the Office Action are requested.

Claims 1-12 stand rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being obvious over U.S. Patent 5,793,216 to Constant. Applicants traverse this rejection and request reconsideration thereof.

The rejected claims relate to a method for determining the composition of a substantially homogenous fluid. The method includes the following stages:

- a) measuring the attenuation and the phase shift of at least two wave beams that have travelled paths of different distances in said fluid;
- b) determining relations modelling the variations of the attenuation and phase shift of the waves as a function of the distance, measured in stage a); and
- c) determining the composition of the fluid by comparing the relations determined in stage b) with a set of previously determined relations, each relation of said set corresponding to a fluid of known composition.

The patent to Constant discloses a device and method for determining the proportion of the phases of a multiphase fluid. The device includes microwave emission and reception devices which are suited to the composition variation of the

multiphase fluid, a processor and control for determining directly, from measurements of amplitude and phase shift of a beam crossing the multiphase medium and a rate of occupation of liquid phase and/or a gas phase for a given section of the pipe. The flow rate of each of the phases is determined.

According to Constant, the proportion of each of the liquid and/or gas phases is determined for at least one elevational PI from the amplitude and phase shift measurements, from data previously stored in a processor and from associated frequency valve. Thus the Constant patent does not disclose and would not have suggested stages b) and c) presently claimed. In particular, the patent to Constant does not consider the variation of attenuation and phase shift of the waves as a function of distances traveled by these waves, and certainly does not disclose determining relations modeling the variations of the attenuation and face shift of the waves as a function of the distances, as presently claimed. Moreover, the Constant patent does not disclose determining the composition of the fluid by comparing the relations determined in stage b) with a set of previously determined relations, each relation of the set corresponding to a fluid of known composition.

For the foregoing reasons, the Constant patent does not disclose nor would not have suggested the presently claimed invention.

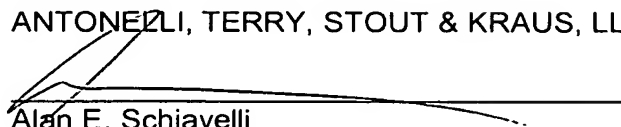
In view of the foregoing amendments and remarks, favourable reconsideration and allowance of all of the claims now in the application are requested.

Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry,

Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 612.43696X00), and
please credit any excess fees to such deposit account.

Respectfully submitted,

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